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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,387	03/14/2001	Kaia Palm	CEMRES.001 A	3322

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EXAMINER

LIU, SAMUEL W

ART UNIT	PAPER NUMBER
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1653

DATE MAILED: 09/16/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/808,387

Applicant(s)

PALM ET AL.

Examiner

Samuel W Liu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-10 and 21-29, drawn to an isolated polynucleotide, an expression vector comprising the polynucleotide and a host cell comprising the vector thereof, are classified in class 536, subclass 23.1, class 435, subclasses 69.1, 320.1, 252.3 and 440.
- II. Claims 1-17, drawn to an isolated polypeptide, are classified in class 530, subclass 350, and class 514, subclass 2.
- III. Claims 18-20, drawn to an antibody, are classified in class 530, subclass 387.1.
- IV. Claim 30, drawn to a method of identifying a binding partner that interacts with the polypeptide comprising providing a support that comprises the polypeptide and contacting the support with the partner molecule, is classified in class 512, subclass 2, class 435, subclass 7.1, and class 424, subclass 409.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II and III are patentably distinct from one another because of the materially different structures of the compounds claimed. The Invention I is drawn to polynucleotide and Invention III to an antibody while Invention II is drawn to a polypeptide. The biopolymers that are the subject of each group are independent and/or patentable distinct from each other because each biopolymer is structurally distinct. The biopolymers of each invention would be expected to exhibit different physical and chemical properties, and are capable of separate manufacture or use.

In addition, Invention I is directed to polynucleotides that is classified in class 536, subclass 23.1, and/or to a cell into which polynucleotides is transferred and a vector where the polynucleotide is bale to directing biosynthesis of the gene product, which process would have been searched in class 435 subclass 69.1. Invention III is directed to antibody that is classified in

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class 530, subclass 387.1. Thus, they acquire the different classification.

Invention I (polynucleotide) and Invention III (antibody) are distinct from each other because of the materially different structures of the compounds claimed. The Invention I is drawn to polynucleotide, whereas Invention III is drawn to immunoglobulin. The biopolymers that are the subject of each group are independent and/or patentable distinct from each other because each biopolymer is structurally distinct. The nucleic acid is composed of deoxyribonucleotides linked by phosphodiester bonds and forms a double helix as a stable conformation while antibody is composed of amino acid residues linked by peptide bonds. Thus, biopolymers of each invention would be expected to exhibit different physical and chemical properties, and are capable of separate manufacture or use.

Inventions II (polypeptide) and Invention III (antibody) are distinct from each other because of the materially different structures of the compounds claimed. Although antibody is belong to a types of polypeptide, antibody is glycosylated and its tertiary structure is unique, where four subunits (2 light chains and 2 heavy chains) associate via disulfide bonds into a Y-shaped symmetric dimer. Thus, the macromolecule of each invention would be expected to exhibit different physical and biochemical properties, and are capable of separate manufacture or use.

Invention II is related to Invention IV as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the polypeptide can be used in proteinchip array to investigate signal transduction pathway in which the polypeptide involves, for example.

Inventions I and III are unrelated to Invention IV. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of

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operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the outcome and mechanism of using polynucleotide in hybridization reaction is distinct or/and different from the mechanism of identifying the binding partner of the polypeptide (Invention IV). Further, the molecular recognition between the antibody and the polypeptide is distinct/different from mode of action of the molecular interaction between the isolated polypeptide and the partner molecule thereof.

Additional Election Under 35 USC 121

Irrespective of whichever group applicant may elect, applicant is further required under 35 US 121 (1) to elect a single disclosed polynucleotide or polynucleotide(s) to which claims are restricted; and (2) to list all claims readable thereon including those subsequently added.

(a) If any Group I is elected, applicant is required to elect one polynucleotide form claims 2-7, 25 and 28 except that SEQ ID NOs: 11 and 17 (see below), because each sequences (SEQ ID NOs: 1, 3, 5, 7, 9, 13, 15, 19, 21, 23, 25, 27, 29, 31, 33 and 11 [or 17]) structurally distinct/different from one another in length or/and sequence structure. Note that since SEQ ID NOs: 11 and 17 encoding the same length polypeptide with a few amino acid alterations, upon election of either one of the sequence (SEQ ID NO: 11 or 17), both the sequences of SEQ ID NOs: 11 and 17 will be examined together.

(b) If any Group II is elected, applicant is required to elect one polynucleotide form claims 13-17 except that SEQ ID NOs: 12 and 18 which are closely related in structure, because each sequences (SEQ ID NOs: 2, 4, 6, 8, 10, 14, 16, 20, 22, 24, 26, 28, 30, 32, 34 and 12 [or 18]) structurally distinct/different from one another in length or/and sequence structure. Note that since the polypeptides SEQ ID NOs: 12 and 18 have the same length with a few amino acid alterations, upon election of either one of the sequence (SEQ ID NO: 12 or 18), both the sequences of SEQ ID NOs: 12 and 18 will be examined together.

In each of (a) and (b) above, the response should also identify the claims readable thereon as directed to the elected invention.

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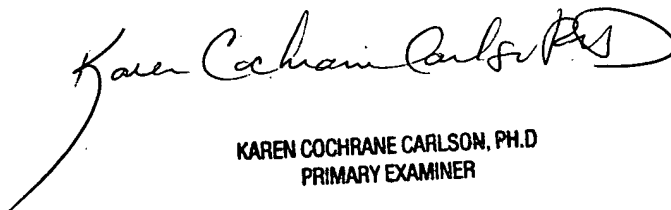
Because these inventions are distinct for the reasons given above and have acquired a separate status in the art shown by their different classification, art recognized divergent subject matter, separate search, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel Wei Liu, Ph.D. whose telephone number is 703-306-3483. The examiner can normally be reached Monday-Friday 9:00 -5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Christopher Low can be reached on (703) 308-2923. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communication and (703) 305-3014 for the after final communication. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Samuel W. Liu, Ph.D.

August 21, 2003


KAREN COCHRANE CARLSON, PH.D.
PRIMARY EXAMINER